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2008 Post-Election Voting Survey of Department of State Voting Assistance Officers

Statistical Methodology Report

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**2008 POST-ELECTION VOTING SURVEY OF
DEPARTMENT OF STATE
VOTING ASSISTANCE OFFICERS:
STATISTICAL METHODOLOGY REPORT**

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Acknowledgments

Defense Manpower Data Center (DMDC) is indebted to numerous people for their assistance with the *2008 Post-Election Survey of Department of State Voting Assistance Officers (2008 DOSVAO)*, which was conducted on behalf of the Office of the Under Secretary of Defense for Personnel and Readiness (OUSD[P&R]). The survey program is conducted under the leadership of Timothy Elig, Director, *Human Resource Strategic Assessment Program (HRSAP)*.

Policy officials contributing to the development of this survey include Erin St. Pierre and Scott Wiedmann (Federal Voting Assistance Program). Other important contributors to the survey development include Elizabeth Gracon (Department of State), and Mike Wilson (Westat).

DMDC's Program Evaluation Branch, under the guidance of Brian Lappin, former Branch Chief, and Kristin Williams, current Branch Chief, is responsible for the development of questionnaires used in the survey program. The lead survey design analyst was Robert Tinney.

DMDC's Personnel Survey Branch, under the guidance of David McGrath, Branch Chief, is responsible for sampling and weighting methods used in the survey program, and survey database construction and archiving. The lead operation analyst on this survey was Kathryn Johnson, SRA International, Inc., supported by Kim Hylton, SRA International Inc., and Tina Thomas, Consortium Research Fellow. Mike Wilson, Westat, Inc. developed weights for this survey. Westat performed data collection and editing.

DMDC's Survey Technology Branch, under the guidance of Frederick Licari, Branch Chief, is responsible for the distribution of datasets outside of DMDC and maintaining records on compliance with the Privacy Act and 32 CFR 219.

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Executive Summary

The Uniformed and Overseas Citizens Absentee Voting Act of 1986 (UOCAVA), 42 USC 1973ff, permits members of the Uniformed Services and Merchant Marine, and their eligible family members and all citizens residing outside the United States who are absent from the United States and its territories to vote in the general election for federal offices. These groups include:

- Members of the Uniformed Services (including Army, Navy, Air Force, Marine Corps, Coast Guard)
- U.S. citizens employed by the Federal Government residing outside the U.S., and
- All other private U.S. citizens residing outside the U.S.

The Federal Voting Assistance Program (FVAP), under the guidance of USD(P&R), is charged with implementing the UOCAVA and evaluating the effectiveness of its programs. The FVAP Office asked DMDC to design, administer, and analyze post-election surveys on Uniformed Services voter participation, overseas nonmilitary voter participation, and local election officials. Without such surveys, the Department will not be able to assess and improve voter access. In addition, such surveys fulfill 1988 Executive Order 12642 that names the Secretary of Defense as the “Presidential designee” for administering the UOCAVA and requires surveys to evaluate the effectiveness of the program in presidential election years.

The objectives of the 2008 post-election surveys are: (1) to gauge participation in the electoral process by citizens covered by UOCAVA, (2) to assess the impact of the FVAP’s efforts to simplify and ease the process of voting absentee, (3) to evaluate other progress made to facilitate voting participation, and (4) to identify any remaining obstacles to voting by these citizens. Surveys were done of military members, federal civilian employees overseas, other U.S. citizens overseas, voting assistance personnel, and local election officials in the U.S.

This report focuses on the *2008 Post-Election Voting Survey of Department of State Voting Assistance Officers (2008 DOSVAO)*, which was designed to capture the attitudes and behaviors of State Voting Assistance Officers assigned to Department of State Voting Assistance Officers (DoSVAOs) throughout the world. This report describes the sampling and weighting methodologies used in the *2008 DOSVAO*. Calculation of response rates is described in the final section.

The *2008 DOSVAO* was a census of all the posts where State Voting Assistance Officers are assigned to U.S. embassies and consulates throughout the world. The total size was 239 State Voting Assistance Officers. The survey administration period lasted from November 7, 2008 to January 8, 2009. There were 201 usable questionnaires.

After the determination of eligibility for the survey and completion of a survey, analytic weights were created to account for varying response rates among population subgroups. First, the sampling weights (the inverse of the selection probabilities) were computed. Since the 2008 *DOSVAO* was a census, the initial weight equals 1.0. Second, the base weights were adjusted to account for survey nonresponse.

Location, completion, and response rates are provided in the final section of this report for both the full sample and for population subgroups. These rates were computed according to the recommendations of the Council of American Survey Research Organizations (CASRO, 1982) and the American Association for Public Opinion Research (AAPOR, 2008). The location, completion, and response rates were 100%, 84%, and 84%.

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Introduction

The Uniformed and Overseas Citizens Absentee Voting Act of 1986 (UOCAVA), 42 USC 1973ff, permits members of the Uniformed Services and Merchant Marine, and their eligible family members and all citizens residing outside the United States who are absent from the United States and its territories to vote in the general election for federal offices. These groups include:

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The objectives of the 2008 post-election surveys are: (1) to gauge participation in the electoral process by citizens covered by UOCAVA, (2) to assess the impact of the FVAP’s efforts to simplify and ease the process of voting absentee, (3) to evaluate other progress made to facilitate voting participation, and (4) to identify any remaining obstacles to voting by these citizens. Surveys were done of military members, federal civilian employees overseas, other U.S. citizens overseas, voting assistance personnel, and local election officials in the U.S.

This report describes sampling and weighting methodologies for the *2008 Post-Election Voting Survey of Department of State Voting Assistance Officers (2008 DOSVAO)*. The first section describes the design and selection of the sample. The second section describes weighting and variance estimation. The final section describes the calculation of response rates, location rates, and completion rates for the full sample and for population subgroups. The design for this survey is based on the 2004 State Voting Assistance Officer (SVAO) survey. Tabulated results of the survey are reported by DMDC (2009).

Sample Design and Selection

Target Population

The 2008 *DOSVAO* was a census of all the posts where State Voting Assistance Officers are assigned to U.S. embassies and consulates throughout the world. The total size was 239 State Voting Assistance Officers.

Sampling Frame

Since the 2008 *DOSVAO* is more precisely a survey of an office or activity and several persons at an embassy or consulate can be assigned VAO duties, it was important to have the survey completed by the most appropriate person. In consultation with the DoS, it was decided that this would most often be the senior American VAO. Therefore, materials were directed to the senior VAO at each embassy or consulate.

It was also realized that, at the time of the survey, the senior VAO could be new to the post and not aware of VAO activities before the presidential election. Therefore, in communications with the State Voting Assistance Officers at the 239 embassies and consulates world-wide, DoS e-mails and other communications, while directed toward the senior VAO, made clear that the most experienced and appropriate person should collaborate in the completion of the survey. Table 1 shows the distribution of State Voting Assistance Officers by geographic region.

Sample Design

The 2008 *DOSVAO* was a census of all State Voting Assistance Officers at DoS embassies and consulates throughout the world. One population characteristic defined the population: region. Region is defined in Table 1.

Table 1.
Voting Assistance Officers by Region

Region	Count	Percent
Total	239	100.00
Africa	46	19.25
East Asia/ Pacific	41	17.15
Europe	63	26.36
NE and SE Asia	38	15.90
Western Hemisphere	51	21.34

Survey Administration

All pre-notification, survey invitation, and thank you/reminder e-mails were sent by the DoS. All completed Web surveys were received by Westat. DoS e-mails were sent under the signature of Janice L. Jacobs, Assistant Secretary of State for Consular Affairs. Table 2 identifies the types of e-mails sent as well as the dates they were sent. The survey administration period lasted from November 7, 2008 to January 8, 2009. Please see DMDC (In preparation) for further information on survey administration.

Table 2.
E-Mail Distribution to Voting Assistance Officers

Messages	Date
Pre-notification	10/31/08
Announcement	11/7/08
Reminder 1	11/14/08
Reminder 2	12/5/09
Reminder 3	12/15/09
Reminder 4	1/5/09

Each survey invitation and reminder e-mail notification included a direct hyperlink to the survey Web site and a unique Ticket Number for logging on to the survey. During the last few days of the survey administration, the DoS placed reminder telephone calls to some State Voting Assistance Officers who had not yet submitted a completed survey.

Survey Administration Issues

Undeliverable E-mails

Five pre-notification messages and survey invitations were returned as undeliverable. The DoS inspected these addresses for typographical errors and other problems. All were corrected for subsequent mailings.

Survey Access Issues

Both the DoS and the contractor, Westat, maintained survey support centers and provided assistance to State Voting Assistance Officers having questions about, or experiencing problems with, the survey. DoS answered questions regarding the purpose, validity, and sponsorship of the survey. Technical problems associated with linking to the survey or entering Ticket Numbers were referred to the contractor, Westat. Westat support center staff supplied assistance to State Voting Assistance Officers experiencing technical difficulties.

Selection for Multiple FVAP Surveys

Among the populations included in the post-election voting surveys for the Federal Voting Assistance Program (FVAP) were overseas Federal civilian employees. By definition, State Voting Assistance Officers are overseas Federal civilian employees and some were selected to participate in two surveys at the same time (the *2008 Post-Election Survey of DoS Voting Assistance Officers* and the *2008 Post-Election Survey of Federal Civilians Overseas*). Participation in the two surveys led to confusion among approximately 10 State Voting Assistance Officers.

The two most frequent confusions regarded Ticket Numbers and objections to the continued sending of “thank you/reminder” notices. Individuals selected for the two surveys would have two different Ticket Numbers. It was not uncommon that the wrong Ticket Number was used to gain entry to a survey. If a doubly sampled person completed one survey they sometimes complained that they should not be receiving additional contacts asking them to complete the survey. When these problems were identified, the DoS sent e-mails to the State Voting Assistance Officers explaining that more than one post-election survey was being fielded.

Weighting

Analytical weights for the *2008 DOSVAO* were created to account for varying response rates among population subgroups presented in Table 1. Sampling weights were computed as the inverse of the selection probabilities and then adjusted for nonresponse. Since the *2008 DOSVAO* was a census, the initial weight is 1.0.

Case Dispositions

First, case dispositions were assigned for weighting based on eligibility for the survey and completion of the return (Table 3). Execution of the weighting process and computation of response rates both depend on this classification.

Final case dispositions for weighting were determined using information from the Survey Control System and returned surveys. Final case dispositions for the *2008 DOSVAO* are shown in Table 4. As seen in this table, there are no ineligibles for this particular survey.

Table 3.
Case Disposition Resolution

Case Disposition	Information Source	Conditions
Eligible, complete response	Item response rate	Item response is at least 50% for respondent.
Eligible, incomplete response	Item response rate	Return is not blank but less than 50% of items were completed.
Nonrespondent	Remainder	Remainder

Table 4.
Sample Size by Case Disposition Categories

Case Disposition Category and (Code Value)	Sample Size
Total	239
Record Ineligible (1)	0
Ineligible Response	
Self/Proxy-report (2)	0
Survey Self report (3)	0
Eligible Response	
Complete (4)	201
Incomplete (5)	14
Unknown Eligibility Response	
Complete (6)	0
Incomplete (7)	0
Refused/Deployed/Other (8)	0
Blank (9)	0
Postal Non-Delivery (10)	0
Non-respondents (11)	24

Nonresponse Adjustments and Final Weight

After the determination of completion of a survey, analytic weights were created to account for varying response rates among population subgroups. The weighting of responses for SVAO is straightforward. As the sample was a census, the base weight for all cases is 1.0. Since, all SVAOs (an office not a person) are eligible, disposition codes are effectively limited to receiving a completed survey vs. did not receive a completed survey. The nonresponse

adjustment was computed in weighting classes defined by geographic region. For example, the population count for Africa is 46 and the respondent count is 39, the adjustment for the Africa cell is 46/39 or a final weight of 1.179. Table 5 presents the complete eligible cases and final weights for all geographic regions.

Table 5.
Voting Assistance Officers Respondent Counts and Final Weights by Region

Region	Population	Respondents	Final Weight
Total	239	201	n/a
Africa	46	39	1.179
East Asia/ Pacific	41	35	1.171
Europe	63	55	1.145
NE and SE Asia	38	29	1.310
Western Hemisphere	51	43	1.186

Variance Estimation

Analysis of the 2008 DOSVAO data requires a variance estimation procedure that accounts for the weighting procedures. The final step of the weighting process was to define strata for variance estimation by Taylor series linearization. The 2008 DOSVAO variance estimation strata correspond to the geographic regions. It was not necessary to collapse any strata since there were at least 25 cases with non-zero final weights in each stratum. Five variance estimation strata were defined for the 2008 DOSVAO.

Location, Completion, and Response Rates

Location, completion, and response rates were calculated in accordance with guidelines established by The Council of American Survey Research Organizations (CASRO). The procedure is based on recommendations for Sample Type II response rates (Council of American Survey Research Organizations, 1982). This definition corresponds to The American Association for Public Opinion Research (AAPOR) RR3 (AAPOR, 2008), which estimates the proportion of eligible cases among cases of unknown eligibility.

Location, completion, and response rates were computed for 2008 DOSVAO as follows:

The location rate (LR) is defined as

$$LR = \frac{\text{adjusted located sample}}{\text{adjusted eligible sample}} = \frac{N_L}{N_E}.$$

The completion rate (CR) is defined as

$$CR = \frac{\text{usable responses}}{\text{adjusted located sample}} = \frac{N_R}{N_L}.$$

The response rate (RR) is defined as

$$RR = \frac{\text{usable responses}}{\text{adjusted eligible sample}} = \frac{N_R}{N_E}.$$

where

- N_L = Adjusted located sample
- N_E = Adjusted eligible sample
- N_R = Usable responses.

To identify the cases that contribute to the components of LR, CR, and RR, the disposition codes were grouped as shown in Table 6.

Table 6.
Disposition Codes for CASRO Response Rates

Case Disposition Category	Code Value
Eligible Sample	4 5 8 9 10 11
Located Sample	4 5 8 9 11
Eligible Response	4
No Return	11
Eligibility Determined	2 3 4 5 8 9
Self Report Ineligible	2 3

Note. Code values are from Table 4.

Ineligibility Rate

The ineligibility rate (IR) is defined as

$$IR = \frac{\text{self report ineligible cases}}{\text{eligible determined cases}}.$$

Estimated Ineligible Postal Non-Deliverable/Not Located Rate

The estimated ineligible postal non-deliverable / not located rate (IPNDR) is defined as

$$IPNDR = (Eligible Sample - Located Sample) * IR.$$

Estimated Ineligible Nonresponse

The estimated ineligible nonresponse (EINR) is defined as

$$EINR = (Not returned) * IR.$$

Adjusted Location Rate

The adjusted location rate (ALR) is defined as

$$ALR = \frac{(Located Sample - EINR)}{(Eligible Sample - IPNDR - EINR)}.$$

Adjusted Completion Rate

The adjusted completion rate (ACR) is defined as

$$ACR = \frac{(Eligible response)}{(Located Sample - EINR)}.$$

Adjusted Response Rate

The adjusted response rate (ARR) is defined as

$$ARR = \frac{(Eligible response)}{(Eligible Sample - IPNDR - EINR)}.$$

Weighted location, completion, and response rates by region for 2008 DOSVAO are shown in Table 7.

Table 7.
Rates for Full Sample and Stratification Levels

Domain	Sample Size	Usable Responses	Sum of Weights	Location Rate (%)	Completion Rate (%)	Response Rate (%)
Sample	239	201	239	100	84	84
Region						
Africa	46	39	46	100	85	85
East Asia / Pacific	41	35	41	100	85	85
Europe	63	55	63	100	87	87
NE and SC Asia	38	29	38	100	76	76
Western Hemisphere	51	43	51	100	84	84

References

- American Association for Public Opinion Research. (2008). *Standard definitions: Final dispositions of case codes and outcome rates for surveys*. 5th edition, Lenexa, KS: Author.
- Council of American Survey Research Organizations. (1982). *On the definition of response rates* (special report of the CASRO task force on completion rates, Lester R Frankel, Chair). Port Jefferson, NY: Author.
- DMDC. (In preparation). *November 2008 Post-Election Voting Survey of Department of State Voting Assistance Officers (2008 DOSVAOs): Administration, datasets, and codebook* (Report No. 2009-018). Arlington, VA: Author.
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